



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,245	01/11/2007	Stefan Scheringer	4266-0122PUS1	1788
2292 7590 07/27/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
KLING, CHARLES				
ART UNIT		PAPER NUMBER		
1711				
NOTIFICATION DATE		DELIVERY MODE		
07/27/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/581,245

Applicant(s)

SCHERINGER ET AL.

Examiner

Charles W. Kling

Art Unit

1711

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 May 2006 and 28 January 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to applicant's amendments and arguments received 07-06-10.
2. Claims **1-16** are pending.
3. Claims **1-16** were rejected in the previous action.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07-06-10 has been entered.

Response to Amendments

5. Examiner acknowledges applicant's amendments to claims **1-16**. It has been determined that no new matter has been entered.

Response to Arguments

6. Applicant has amended claims **1-16**; significantly changing the claim language and scope.

7. Regarding amended claims **1-16**, applicant contends that the cited references do not teach all of the claim limitations.
8. This argument has been fully considered but is moot in view of the new ground(s) of rejection.
9. Claims **1-16** are newly rejected, as stated below.

Drawings

10. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the exit nozzles in the washing zones or rinsing zones as described in the specification (lines 24-25 of page 11). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. See MPEP § 608.02(d).
11. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

12. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 1 seems to imply that the exhaust-air steam can be produced in the dishwasher as a result of regulated flow from nozzles in the washing zone. The specification and figures do not disclose air nozzles to be located in the washing zone. To the contrary, the only nozzles disclosed to be in the washing zone are part of the washing system (element 16) and no mention is made of their flow regulation.

Claim Rejections - 35 USC § 112

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

15. With regard to claim **1**: Claim **1** seems to imply that the exhaust-air steam can be produced in the dishwasher as a result of regulated flow from nozzles in the washing zone. This feature is not adequately described in the disclosure in such a way as to enable one skilled in the art to make or use the invention.

16. With regard to claims **2-16**: Dependent claims are not enabled, for at least the same reason(s), when they depend from a non-enabled claim.

17. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

18. Claims **13, 16** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

19. With regard to claim **13**: The limitation "the exit nozzles" is recited in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been taken to mean "the nozzles". Further, the scope of this limitation is unclear. It is not clear whether this limitation refers to the "nozzles for blowing hot air" (line 5 of claim 1) or the "nozzles in the washing zone" (line 6 of claim 1). For the purposes of examination this claim limitation has been taken to refer to the "nozzles for blowing hot air".

20. Further regarding claim 13: The limitation "the pivoting direction" is recited in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been taken to mean "a pivoting direction".
21. With regard to claim 16: The limitation "the drive" is recited in line 3. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination this claim element has been omitted.

Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

23. **The elements of the claims are anticipated, disclosed, and/or taught by the relevant prior art as cited in parenthesis and bold type.**
24. Claims 1, 7-11 are rejected under 35 U.S.C. 102(b) as being anticipated by PILZ (DE 30 19 922) (see attached English abstract and machine translation).
25. With regard to claim 1: PILZ discloses a commercial dish washer system (**title**) that includes a washing zone (**element 3 of figure 4**) with nozzles (**nozzles shown as circles with spray pattern lines inside element 3 in figure 4**); a rinsing zone (**element 4 of figure 4**); a drying zone (**elements 5-6, 8 of figure 4**) with nozzles (**nozzle shown as exit end of element 11 in figure 4**); and a suction-extraction

location **(elements 14, 151 of figure 4)**; wherein the nozzles in the drying and/or washing zone can be regulated **(all flow in a dishwasher can be regulated i.e. by turning the machine and/or a valve on or off)**; and wherein an exhaust-air stream moves counter to the direction of the conveyor **(air flow stream shown moving counter to the conveyor direction in the vicinity of elements 6-8 in figure 4)**.

26. With regard to claims 7-8: PILZ discloses a horizontal deflecting surface running beneath the conveyor in the drying zone **(air shown deflecting off surface above element numbers 9-10 in figure 4)**.

27. With regard to claim 9: PILZ discloses a curtain **(right most element 9 of figure 4)** on the outlet side of the dishwasher that bounds an air intake opening **(curtain shown directing air in figure 4)**.

28. With regard to claim 10: PILZ discloses a heat pump **(element 151 of figure 4)** with an exhaust fan **(element 14 of figure 4)** that recovers heat from the exhaust air **(abstract)**. The capacity of this exhaust fan would be directly related to the quantity of air pulled from the drying zone **(as shown by air flow arrows in figure 4)**.

29. With regard to claim 11: PILZ discloses the air stream extracted by the exhaust fan **(element 14 of figure 4)** corresponding to external air streams which are taken via intake openings **(as shown in figure 4)**.

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

31. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ in view of WEIHE (US 3,598,131).
32. With regard to claim 2: PILZ does not appear to explicitly/expressly disclose the suction-extraction location being in the region of the dishwasher inlet.
33. However, WEIHE discloses a steam collection system for dishwashing machines that includes a suction-extraction device (**element 65 of figure 1**) in the region of the dishwasher inlet (**as shown in figure 1**).
34. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ to include the suction-extraction device location of WEIHE, since locating a suction-extraction device near the inlet would serve to reduce the humidity in the room, as taught by WEIHE (**abstract**).
35. Claims 3-6, 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ and WEIHE as applied to claim 2 above, and further in view of RAGO ET AL. (US PG-Pub 2005/0072019).
36. With regard to claim 3: PILZ discloses a drying fan (**element 11 of figure 4**) being arranged in the drying zone. PILZ also discloses the nozzles of the drying fan being adjusted to preferred angles of 30° to 75° to optimize the heat recovery of the machine (**lines 22-27 of page 2 of the machine translation**).

37. PILZ does not appear to explicitly/expressly disclose the fan having pivotably designed nozzles.

38. However, RAGO ET AL. discloses a drying fan than has pivoting exit nozzles **(abstract, pivoting action best shown in figure 4)**.

39. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ and WEIHE to include the drying fan with pivoting nozzles of RAGO ET AL., since one of skill in the art at the time of the invention would have known that the sweeping action created by pivoting nozzles would serve to enhance the drying speed and effectiveness.

40. With regard to claims 4, 6: PILZ discloses the nozzles of the drying fan being adjusted to preferred angles of 30° to 75° to optimize the extraction air flow volume of the dish washer system **(lines 22-27 of page 2 of the machine translation)**. As such, varying the angle of the nozzle would cause differing quantities of air to be extracted from the drying zone.

41. Furthermore, these claim limitations are merely intended use of the apparatus. The manner in which an apparatus operates is not germane to the issue of patentability of the apparatus itself. *Ex parte* Wikdahl 10 USPQ 2d 1546, 1548 (BPAI 1989); *Ex parte* McCullough 7 USPQ 2d 1889, 1891 (BPAI 1988); *In re* Finsterwalder 168 USPQ 530 (CCPA 1971); *In re* Casey 152 USPQ 235, 238 (CCPA 1967)

42. With regard to claim 5: WEIHE discloses the dishwasher being operated without clouds of steam at the inlet and outlet **(lines 66-69 of column 3)**.

43. Furthermore, this claim limitation is merely intended use of the apparatus. The manner in which an apparatus operates is not germane to the issue of patentability of the apparatus itself. *Ex parte Wikdahl* 10 USPQ 2d 1546, 1548 (BPAI 1989); *Ex parte McCullough* 7 USPQ 2d 1889, 1891 (BPAI 1988); *In re Finsterwalder* 168 USPQ 530 (CCPA 1971); *In re Casey* 152 USPQ 235, 238 (CCPA 1967)

44. With regard to claim 12: RAGO ET AL. discloses the nozzles being pivoted by pneumatic and mechanical means (**mechanics shown in figure 4**).

45. With regard to claim 13: RAGO ET AL. discloses the nozzles pivoting while the drying fan is in use (**abstract**).

46. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ in view of ANDERSSON (SE 9503485) (see English abstract made of record in a previous action).

47. With regard to claim 14: PILZ discloses a heat pump (**element 151 of figure 4**) with an exhaust fan (**element 14 of figure 4**) that recovers heat from the exhaust air (**abstract**).

48. PILZ does not appear to explicitly/expressly disclose the exhaust fan to be a speed-regulated fan.

49. However, ANDERSSON discloses a ventilation control system which utilizes a speed-regulated fan (**abstract**).

50. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ to include the speed-

regulated fan of ANDERSSON, since all the claimed elements were known in the prior art and since the speed-regulated fan would serve to decrease the noise level and energy use, as taught by ANDERSSON (**abstract**).

51. Claims **15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over PILZ, WEIHE, and RAGO ET AL. as applied to claims 3-6, 12-13 above, and further in view of ROBINSON (US 3,896,827).

52. PILZ, WEIHE, and RAGO ET AL. do not appear to explicitly/expressly disclose a fan or air nozzles being controlled based on a sensed temperature, moisture content, or presence of wash ware.

53. However, ROBINSON discloses a dishwashing machine that senses the presence of dishes, water temperature, water pressure, and detergent concentration to control the washing process (**abstract, lines 1-35 of column 2**).

54. At the time of the invention, it would have been *prima facie* obvious to one having ordinary skill in the art to modify the dish washer system of PILZ, WEIHE, and RAGO ET AL. to apply the control teachings of ROBINSON to a fan or air nozzle, since one of skill in the art at the time of the invention would have known that the use of automatic control, in response to sensor or user input, is commonly used in the dishwasher art to control washing, rinsing, sanitizing, and drying processes.

Conclusion

55. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. PAGNOZZI ET AL. (US 4,176,466) is considered pertinent as it deals with a pivoting drying nozzle.
 - b. VOORHEES (US 4,326,551) is considered pertinent as it deals with a heat recovery system for a dishwasher that utilizes sensors and a control system to increase efficiency.
 - c. EIDEVAG ET AL. (GB 2 155 772) is considered pertinent as it deals with a conveyor washing machine where the exhaust air moves counter to the conveyor.
 - d. KERN ET AL. (US 5,820,457) is considered pertinent as it deals with a pivoting air nozzle.
56. The claim rejections under 35 USC 112, stated in the previous action, are hereby withdrawn.
57. Claims 1-16 are newly rejected under 35 USC 112, as stated above.
58. The double patenting rejection stated in the previous action stands in abeyance.
59. Applicant's arguments received 07-06-10 have been fully considered but they are moot in view of the new grounds of rejection.
60. Claims 1-16 stand rejected under 35 USC 102(b) and 35 USC 103(a), as stated above.

61. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES W. KLING whose telephone number is 571-270-5524. The examiner can normally be reached on Monday through Friday 8:00 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles W. Kling/
Examiner, Art Unit 1711

/Michael Barr/
Supervisory Patent Examiner, Art
Unit 1711